

**IN THE CLAIMS:**

Please substitute the following claims for the same-numbered claims in the application:

Claims 1-13 (canceled).

Claim 14 (Currently Amended): A method for determining a manner of classifying a data sample in one of a number of predetermined classes, said method comprising:  
computing a weight value for each of a plurality of classifiers, associating data classifiers in a decision fusion application comprising said data sample, wherein said classifiers indicate a manner of classifying a said sample in said one of a number of predetermined classes;  
computing a weight value for each of a plurality of classifiers;  
calculating for each of said predetermined classes a weighted summation across said classifiers of a likelihood that the sample belongs to a particular class, weighted by said weight value; and  
designating said sample as belonging to said particular class for which said weighted summation is greatest in value[. . .];  
assigning accuracy confidence values for each classifier in said decision fusion application based on said greatest value; and  
improving a classification accuracy of said decision fusion application based on said accuracy confidence values.

**Claim 15 (Original):** The method of claim 14, whercin said weight value for a classifier comprises a sample confidence component, wherein said sample confidence component includes a linear combination of an order statistic.

**Claim 16 (Original):** The method of claim 15, wherein said linear combination is defined by a log-likelihood of respective predetermined classes for classifiers corresponding to said sample.

**Claim 17 (Original):** The method of claim 15, whercin said linear combination for a particular sample comprises a difference between a most likcly and a second most likely class associated with a particular classifier.

**Claim 18 (Original):** The method of claim 16, wherein the weight value comprises said sample confidence component equaling said log-likelihood of respective predetermined classes for classifiers corresponding to said sample; and a cumulative component comprising a mean of said sample confidence component over a plurality of samples.

**Claim 19 (Original):** The method of claim 18, wherein said cumulative component is successively updated with said sample confidence component of each said sample.

**Claim 20 (Currently Amended):** A program storage device readable by computer, tangibly embodying a program of instructions executable by said computer to perform a method for determining a manner of classifying a data sample in one of a number of predetermined classes,

said method comprising:

computing a weight value for each of a plurality of classifiers, associating data classifiers in a decision fusion application comprising said data sample, wherein said classifiers indicate a manner of classifying a said sample in said one of a number of predetermined classes;

computing a weight value for each of a plurality of classifiers;

calculating for each of said predetermined classes a weighted summation across said classifiers of a likelihood that the sample belongs to a particular class, weighted by said weight value; and

designating said sample as belonging to said particular class for which said weighted summation is greatest in value[.].;

assigning accuracy confidence values for each classifier in said decision fusion application based on said greatest value; and

improving a classification accuracy of said decision fusion application based on said accuracy confidence values.

Claim 21 (Original): The program storage device of claim 20, wherein said weight value for a classifier comprises a sample confidence component, wherein said sample confidence component includes a linear combination of an order statistic.

Claim 22 (Original): The program storage device of claim 21, wherein said linear combination is defined by a log-likelihood of respective predetermined classes for classifiers corresponding to said sample.

Claim 23 (Original): The program storage device of claim 21, wherein said linear combination for a particular sample comprises a difference between a most likely and a second most likely class associated with a particular classifier.

Claim 24 (Original): The program storage device of claim 22, wherein the weight value comprises said sample confidence component equaling said log-likelihood of respective predetermined classes for classifiers corresponding to said sample; and a cumulative component comprising a mean of said sample confidence component over a plurality of samples.

Claim 25 (Original): The program storage device of claim 24, wherein said cumulative component is successively updated with said sample confidence component of each said sample.

Claim 26 (Currently Amended): An apparatus for determining a manner of classifying a data sample in one of a number of predetermined classes, said apparatus comprising:

~~means for computing a weight value for each of a plurality of classifiers, wherein said classifiers indicate a manner of classifying a sample in one of a number of predetermined classes;~~

~~means for calculating for each of said predetermined classes a weighted summation across said classifiers of a likelihood that the sample belongs to a particular class, weighted by said weight value; and~~

~~means for designating said sample as belonging to said class for which said weighted summation is greatest in value.~~

means for associating data classifiers in a decision fusion application comprising said data sample, wherein said classifiers indicate a manner of classifying said sample in said one of a number of predetermined classes;

means for computing a weight value for each of a plurality of classifiers;

means for calculating for each of said predetermined classes a weighted summation across said classifiers of a likelihood that the sample belongs to a particular class, weighted by said weight value;

means for designating said sample as belonging to said particular class for which said weighted summation is greatest in value;

means for assigning accuracy confidence values for each classifier in said decision fusion application based on said greatest value; and

means for improving a classification accuracy of said decision fusion application based on said accuracy confidence values.

Please add the following claims:

Claim 27 (New): The method of claim 14, wherein said classifiers comprise audio and video classifiers, and wherein said decision fusion application comprises an audiovisual speech recognition application.

**Claim 28 (New):** The method of claim 14, wherein said weighted summation comprises an overall confidence component across said predetermined classes.

**Claim 29 (New):** The method of claim 28, further comprising determining a relative confidence level relating to an accuracy of said classifiers for each sample in said decision fusion application based on said sample confidence component and said overall confidence component.

**Claim 30 (New):** The program storage device of claim 20, wherein said classifiers comprise audio and video classifiers, and wherein said decision fusion application comprises an audiovisual speech recognition application.

**Claim 31 (New):** The program storage device of claim 20, wherein said weighted summation comprises an overall confidence component across said predetermined classes.

**Claim 32 (New):** The method of claim 31, further comprising determining a relative confidence level relating to an accuracy of said classifiers for each sample in said decision fusion application based on said sample confidence component and said overall confidence component.